CLAIMS

None of the claims has been amended. The claims are reproduced below for the Examiner's convenience.

1-18. (Cancelled)

19. (Previously Presented) A method for recognizing faces of persons, comprising:

training a system to recognize a facial component;

populating a first knowledge base with facial components and, for each facial component, the facial component's body part classification;

using the first knowledge base to determine, for each facial component in a plurality of facial components, a body part classification for the facial component, wherein the plurality of facial components comprises facial components extracted from facial identification training image data of a face of a first person at a first viewpoint and a face of a second person at a second viewpoint;

determining, from said plurality of facial components and their determined body part classifications, a first indicator component for the first person and a second indicator component for the second person, wherein the first indicator component comprises a first facial component that maximizes a posterior probability that the person class of the first facial component is the first person, and wherein the second indicator component comprises a second facial component that maximizes a posterior probability that the person class of the second facial component is the second person.

20. (Previously Presented) The method of claim 19, wherein a body part classification of the first indicator component and a body part classification of the second indicator component are different.

21. (Previously Presented) The method of claim 19, wherein determining the first indicator component for the first person comprises determining the first indicator component for the first person using Bayesian estimation.

22. (Previously Presented) The method of claim 19, wherein determining the first indicator component for the first person comprises:

determining a first conditional probability, that a class is the first person, of the facial components extracted from the facial identification training image data of the face of the first person at the first viewpoint;

determining a first posterior probability, that a class is the first person, by multiplying the conditional probability at the first viewpoint by a prior probability, that a class is the first person;

determining a second conditional probability, that a class is the first person, of facial components extracted from facial identification training image data of the face of the first person at an additional viewpoint; and

determining a second posterior probability, that a class is the first person, by multiplying the second conditional probability by the first posterior probability.

23. (Previously Presented) The method of claim 22, wherein the prior probability, that the class is the first person, comprises one Nth where N is a number of person classes.

24. (Previously Presented) The method of claim 19, further comprising storing, in a second knowledge base, the first indicator component for the first person and the second indicator component for the second person.

25. (Previously Presented) The method of claim 24, further comprising

receiving body part classifications of facial components at various viewpoints of a person to be identified; and

identifying the person using an indicator component stored in the second knowledge base.

26. (Previously Presented) The method of claim 19, wherein the first viewpoint and the second viewpoint are different.

27. (Previously Presented) The method of claim 19, wherein training the system to recognize the facial component comprises:

receiving facial component training image data of faces of persons at various viewpoints;

extracting facial components at various viewpoints from the facial component training image data of faces of persons at various viewpoints; and

training a body part classifier module using the extracted facial components.

28. (Previously Presented) The method of claim 27, wherein the body part classifier module performs one-versus-all classification.

29. (Previously Presented) The method of claim 19, wherein using the first knowledge base to determine, for each facial component in the plurality of facial components, the body part classification for the facial component, wherein the plurality of facial components comprises facial components extracted from facial identification training image data of the face of the first person at the first viewpoint and the face of the second person at the second viewpoint, comprises:

receiving facial identification training image data of the face of the first person at the first viewpoint and the face of the second person at the second viewpoint;

extracting facial components from the facial identification training image data; and

determining body part classifications of the extracted facial components using the first knowledge base.

30. (Previously Presented) A system for recognizing faces of persons, comprising:

a training module configured to train a facial component recognition system to recognize a facial component;

a population module configured to populate a first knowledge base with facial components and, for each facial component, the facial component's body part classification;

a body part module configured to use the first knowledge base to determine, for each facial component in a plurality of facial components, a body part classification for

the facial component, wherein the plurality of facial components comprises facial components extracted from facial identification training image data of a face of a first person at a first viewpoint and a face of a second person at a second viewpoint;

an indicator component module configured to determine, from said plurality of facial components and their determined body part classifications, a first indicator component for the first person and a second indicator component for the second person, wherein the first indicator component comprises a first facial component that maximizes a posterior probability that the person class of the first facial component is the first person, and wherein the second indicator component comprises a second facial component that maximizes a posterior probability that the person class of the second facial component is the second person.

31. (Previously Presented) The system of claim 30, wherein a body part classification of the first indicator component and a body part classification of the second indicator component are different.

32. (Previously Presented) The system of claim 30, wherein the indicator component module is further configured to determine the first indicator component for the first person using Bayesian estimation.

33. (Previously Presented) The system of claim 30, wherein the indicator component module is further configured to:

determine a first conditional probability, that a class is the first person, of the facial components extracted from the facial identification training image data of the face of the first person at the first viewpoint;

determine a first posterior probability, that a class is the first person, by multiplying the conditional probability at the first viewpoint by a prior probability, that a class is the first person;

determine a second conditional probability, that a class is the first person, of facial components extracted from facial identification training image data of the face of the first person at an additional viewpoint; and

determine a second posterior probability, that a class is the first person, by multiplying the second conditional probability by the first posterior probability.

34. (Previously Presented) The system of claim 33, wherein the prior probability, that the class is the first person, comprises one Nth where N is a number of person classes.

35. (Previously Presented) The system of claim 30, further comprising a storage module configured to store, in a second knowledge base, the first indicator component for the first person and the second indicator component for the second person.

36. (Previously Presented) The system of claim 35, further comprising

a receiving module configured to receive body part classifications of facial components at various viewpoints of a person to be identified; and

an identification module configured to identify the person using an indicator component stored in the second knowledge base.

37. (Previously Presented) The system of claim 30, wherein the first viewpoint and the second viewpoint are different.

38. (Previously Presented) The system of claim 30, wherein the training module is further configured to:

receive facial component training image data of faces of persons at various viewpoints;

extract facial components at various viewpoints from the facial component training image data of faces of persons at various viewpoints; and

train a body part classifier module using the extracted facial components.

39. (Previously Presented) The system of claim 38, wherein the body part classifier module performs one-versus-all classification.

40. (Previously Presented) The system of claim 30, wherein the body part module is further configured to:

receive facial identification training image data of the face of the first person at the first viewpoint and the face of the second person at the second viewpoint;

extract facial components from the facial identification training image data; and

determine body part classifications of the extracted facial components using the first knowledge base.